



WIRELESS MICROPHONE SYSTEM



USER'S MANUAL

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WIRELESS MICROPHONE SYSTEM

ENGLISH

TROUBLE SHOOTING & BASIC SET

8. Trouble-shooting

Problem	Solution
No sound	• Check receiver and microphone power. • Make sure transmitter and receiver frequency is same. • Check if amplifier or other equipment's power is on. Check if the connection between receiver and mixer or amplifier is proper. • Check microphone battery power. • Check receiver antenna's connection. • Check if receiver is too close to metal parts or there is barrier between transmitter and receiver.
Noise or interference occurs	• Make sure microphone battery is installed firmly and there is no interferential source. • Check if signal cable is well connected. • Check receiver antenna's connection. • When using 2 or more microphones simultaneously, make sure the frequencies are not interfered each other. • Check if the interference comes from other wireless microphone, TV, radio and etc.
Distortion	• Check if amplifier volume is too high or too small. • Check if the interference comes from other wireless microphone, TV, radio and etc.

Note: This system may be interfered by radio wave.

9. Basic Set

(1) Receiver	1PC
(2) Antenna	2PCS
(3) Transmitter	1PC
(4) 9V Battery	1PC
(5) Adapter	1PC
(6) 6.3 Φ Signal Cable	1PC
(7) XLR Signal Cable	1PC
(8) User's Manual	1PC
Optional parts:	
• Mounting rack	2PCS
• High sensitivity cartridge set	

Designs and specifications are subject to change without notice for improvement.

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IMPORTANT SAFEGUARDS

1. Introduction

Thank you for choosing our UHF single channel true diversity wireless microphone system. Before use please read this manual carefully to understand the correct operation and have the best results. It is a professional wireless microphone system designed for stage applications. All the features completely meet the strict requirement of professional users. With excellent quality, affordable price, stable performance, and easy to operate, UR-M256LC is your best choice.

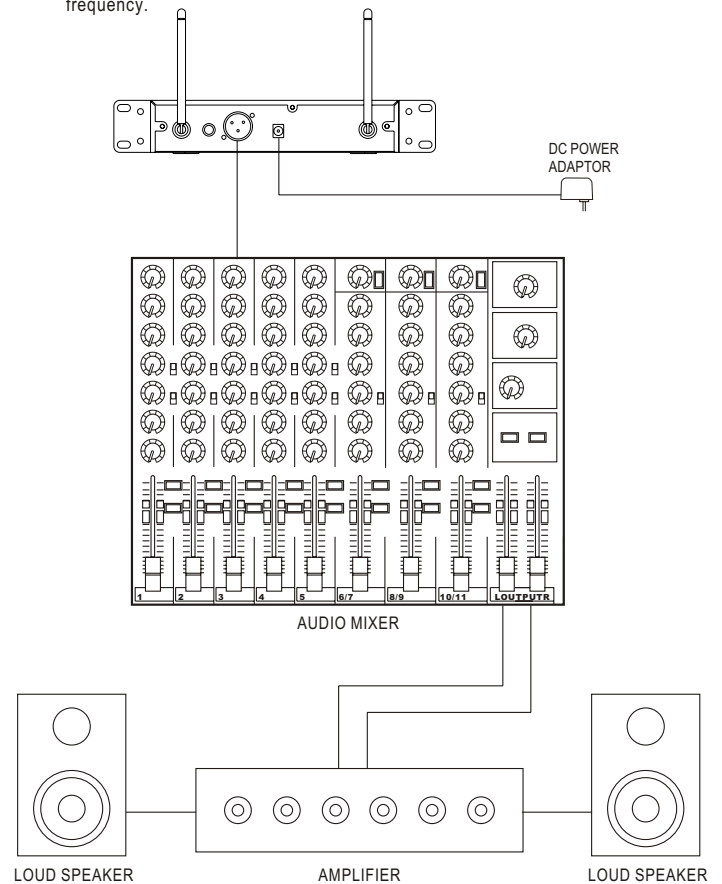
2. Important Safeguards

- **FCC Caution :** To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).
- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.
- Do not open this product by yourself for adjustment.
- When abnormality occurs, please submit this equipment to our dealer for examination, adjustment and repair.
- One receiver cannot receive signal from two same frequency microphones simultaneously. Other microphones with different frequency or brand cannot be used for this receiver.
- To reduce the risk of fire or electric shock, do not remove the cover. High voltage parts inside.  Do Not Disassemble
- To reduce the risk of electric shock, do not touch power outlet when it thunders, do not pull power plug with wet hands.  Do Not Touch
- To reduce the risk of fire or electric shock from damaged power cord, do not pull power cord from power outlet strongly. Always grasp the plug tightly then pull it out. Turn off the power if this equipment will not be used for a long period of time after set-up.  Pull Out AC Plug
- To reduce the risk of electric shock, use only the specified power voltage.  Forbidden
- To prevent damage from dropping or inclining, do not put heavy articles on the top of this equipment, do not place this equipment on shaking, inclining unstable places.  Forbidden
- To reduce the risk of electric shock, do not put vessel with liquid or small metal parts on the top of this equipment, do not let metal or flammable parts drop into this equipment.  Forbidden
- To reduce the risk of fire or electric shock, do not expose this equipment and power cord to moisture, dust and sun. Keep away from hot apparatus or places with oil, smoke and water.  Forbidden
- Keep power plug and outlet clean. Power plug and outlet with accumulated dust is apt to cause fire, clean them regularly. Insert power plug into power outlet entirely.  Caution
- When abnormality occurs, please pull out power plug and contact our dealer when the following happens:
 - ① When smoke comes out from this equipment and burning smell can be smelt.
 - ② Water or other article goes into this equipment.
 - ③ Drop on the ground and unit is damaged.
 - ④ No sound output.
 - ⑤ Power cord damaged. (Cord core exposes or cord broken) Caution

CONNECTION

7. Connection

Use 6.3Φ unbalanced signal cable or 3 pin XLR balanced signal cable to connect receiver AF Output to MIC-IN jack on mixer or amplifier. (Refer to following illustration) Before installation please make sure receiver frequency is same as transmitter frequency.



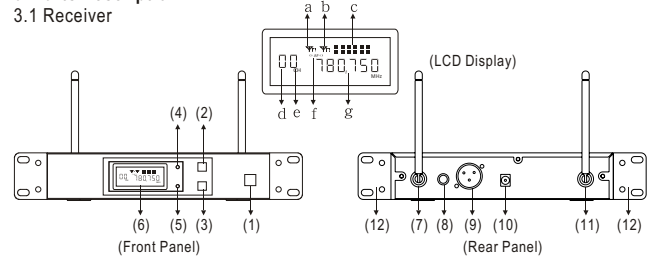
USER'S GUIDE

4. Channel adjust: Press CH button (6) for about 3 seconds, CH number on LCD will flash; release CH button (6), press GP button to move CH UP or CH button to move CH down.
5. After adjusting Group and Channel, release all buttons, group or channel will flash about 3 seconds and then stop, frequency will be locked and saved.
6. Adjust transmitter's GP and CH (according to above procedure 3, 4, 5) to make the frequency same as receiver.
7. After 30 seconds if no buttons are pressed, LCD will display battery power. Press GP button or CH button, LCD will show GP number and CH number.
Note: If transmitter's LCD shows "LO", it means battery power will be exhausted. Please exchange new battery. But the transmitter will still work normally for about 3 minutes. After 3 minutes if battery is not replaced, transmitter will stop working.
8. Insert attached headset or clip-on MIC into body pack transmitter MIC-IN jack. Use attached screwdriver (3) to adjust Gain Control (2) to have appropriate audio gain.

PARTS DESCRIPTION

3. Parts Description

3.1 Receiver

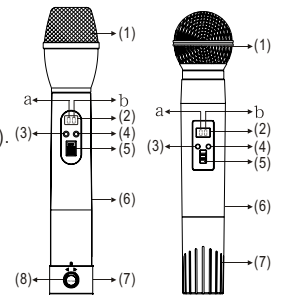


- (1) Power Switch
- (2) GP: Group set button and GP/CH adjust (UP).
- (3) CH: Channel set button and GP/CH adjust (DOWN).
- (4) GP LED indicator: press GP button, it will light.
- (5) CH LED indicator: press CH button, it will light.
- (6) LCD Display a. RF-A reception b. RF-B reception c. RF signal strength indicator d. GP number e. CH number f. AF signal strength indicator g. Frequency
- (7) Antenna B
- (8) AF unbalanced output: phone jack.
- (9) AF balanced output: XLR jack, balanced AF signal output sensitivity is same as dynamic microphone.
- (10) DC Power Source Input Jack: Connect AC/DC power supply
- (11) Antenna A
- (12) Mounting Rack

3.2 Microphone

A. Handheld Microphone

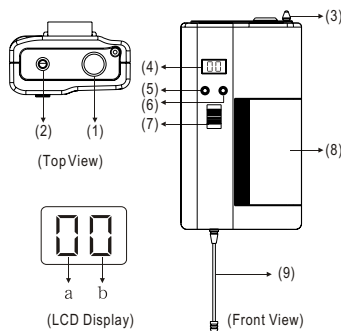
- (1) Mesh & cartridge: Cartridge is protected by mesh to eliminate "POP" noise.
- (2) CH LCD display
a. GP number b. CH number
- (3) GP: Group set button and GP/CH adjust (UP).
- (4) CH: Channel set button and GP/CH adjust (DOWN).
- (5) Power Switch
- (6) Handheld microphone body: Connect the cartridge, mesh, and battery compartment.
- (7) Battery Compartment/ Cover: For setting battery.
- (8) Open Button: push to open battery compartment. (Picture for reference only)



PARTS DESCRIPTION & SPECIFICATIONS

B. Body Pack Transmitter

- (1) MIC-IN Jack
- (2) Gain Control
- (3) Small Screwdriver
- (4) CH LCD display
 - a. GP number b. CH number
- (5) GP: Group set button and GP/CH adjust (UP).
- (6) CH: Channel set button and GP/CH adjust (DOWN).
- (7) Power Switch
- (8) Battery Compartment/ Cover: Insert 9V battery.
- (9) Antenna



4. Specifications

4.1 General

Frequency Range	614MHz-806MHz
Oscillation Mode	PLL synthesized
Frequency Number	256
Frequency Response	50Hz-20KHz
Receiving Range	100m

4.2 Receiver

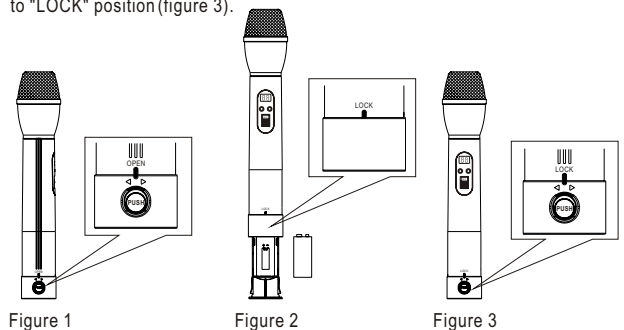
Frequency Bandwidth	25MHz
Frequency Stability	$\pm 0.005\%$
Sensitivity	-95dBm S/N > 40dB
Adjacent Channel Rejection	> 90dB
AF Output	100mV $\pm$ 5mV
SNR	> 100dB
Distortion	< 1%(AF=1KHz)
Function Display Mode	LCD
Power Source	DC 12-15V

4.3 Transmitter

Frequency Bandwidth	25MHz
Frequency Stability	$\pm 0.005\%$
Modulation	FM
Spurious Emission	> 55dB
AF Modulation	$\pm 25K$
Power Source	DC 9V
Current Consumption	40mA
Transmitting Power	10mW
Function Display Mode	LCD

USER'S GUIDE

4. Channel adjust: Press CH button(4) for about 3 seconds, CH number on LCD will flash; release CH button (4), press GP button to move CH UP or CH button to move CH down.
 5. After adjusting Group or Channel, release all buttons, group or channel will flash about 3 seconds and then stop, frequency will be locked and saved.
 6. Adjust microphone's GP and CH (according to above procedure 3,4,5) to make the frequency same as receiver.
 7. After 30 seconds if no buttons are pressed, LCD will display battery power. Press GP button or CH button, LCD will show GP number and CH number.
- Note:** If microphone LCD shows "LO", it means battery power will be exhausted. Please exchange new battery. In the meanwhile, microphone will still work normally for about 3 minutes. After 3 minutes if battery is not replaced, microphone will stop working.
8. Take out battery if microphone is not going to be used for a long period of time.
 9. Battery installation.
 - A. Turn battery bottom cover 90 degree anti-clockwise to "OPEN" position (figure 1), press "push" button to spring out battery compartment a little, pull out the battery compartment and install or exchange battery.
 - B. Insert 9V battery (pay attention to the positive and negative pole) and then push the battery compartment back (figure 2). Turn battery cover 90 degree clockwise to "LOCK" position (figure 3).



6.3 Body Pack Transmitter

1. Open battery cover(8), insert attached 9V battery into battery compartment and then close battery cover.
2. Turn on power switch (7), LCD will show group and channel set at last using time.
3. Group adjust: Press GP button (5) for about 3 seconds, GP number on LCD will flash; release GP button (5), now GP button changes to UP function and CH button changes to DOWN function, press GP button to move GP UP or CH button to move GP down.

USER'S GUIDE

6. User's Guide

6.1 Receiver

1. Install attached two BNC antennas on the antenna jack at the rear panel of the receiver. Incline antennas outwards 45 degree to get the best reception.
2. To get the best reception, install receiver at least 1 metre above the ground. Keep transmitter at least 1 meter from receiver antennas and far away from interferential sources.
3. Use attached mounting rack to install receiver on EIA standard rack.
4. Plug one end of the AC power adapter into AC power source with specified voltage and the other end into DC INPUT connector (10) on the back of receiver.
5. AF output: Insert one end of the signal cable into AF output jack (8) or (9) at the back of the receiver and the other end of the signal cable into amplifier or mixer MIC-IN jack.
6. Turn on power switch (1), LCD will light and show the group and channel number set at last using time.
7. Press GP button (2), GP LED (4) will light; release the GP button, GP LED will extinguish. Press CH button (3), CH LED indicator (5) will light; release the CH button, CH LED will extinguish.
8. Group adjust: Press GP button (2) for about 3 seconds, GP number on LCD will flash, frequency will also flash; release GP button (2), now GP button changes to UP function and CH button changes to DOWN function, press GP button to move GP UP or CH button to move GP down.
9. Channel adjust: Press CH button (3) for about 3 seconds, CH number on LCD will flash, frequency will also flash; release CH button (3), press GP button to move CH UP or CH button to move CH down.
10. After adjusting Group and Channel, release all buttons, group or channel will flash about 3 seconds and then stop, frequency will be locked and saved.
11. Adjust receiver GP and CH to be same as transmitter GP and CH (according to the above procedure 7, 8, 9), receiver LCD will show AF signal strength, RF signal strength and RFA or RF B reception. (These information will not show when adjusting GP or CH, transmitter is not turned on, or GP and CH of transmitter is different from receiver.)

Note: This system has 16 sets of preset frequencies (from 00 to 0F) which will not interfere each other. Users are suggested to use these frequencies firstly. Choose other frequencies if more frequencies are needed.

6.2 Handheld Microphone

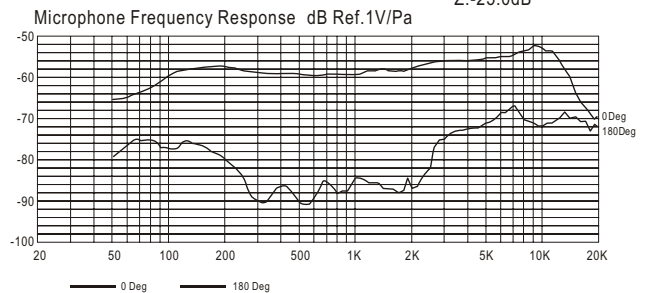
1. Open battery cover then insert battery (pay attention to the positive and negative pole). Close battery cover (please see following illustration for battery installation).
2. Turn on power switch (5), LCD will show group and channel set at last using time.
3. Group adjust: Press GP button (3) for about 3 seconds, GP number on LCD will flash; release GP button (3), now GP button changes to UP function and CH button (4) changes to DOWN function, press GP button to move GP UP or CH button to move GP down.

FEATURES

5. Features

1. UHF PLL synthesized circuit, with 256 selectable frequencies for choice.
2. True diversity receiving mode can effectively avoid drop-outs and dead spots. Available distance can be more than 100 metre.
3. With special anti-interference circuit and tone code security to effectively avoid interference and eliminate noise.
4. Adopt high stable circuit design and spare parts, this device can be operated in a wide range of temperature environment ($-10^{\circ}\text{C} \sim +60^{\circ}\text{C}$). Advanced VCO circuit design to allow performers shout loudly without any broken voice happen. It is the best microphone system for stage performance.
5. Using high sensitivity, wide frequency response dynamic cartridge and advanced signal processing circuit to present the real and natural voice of both male and female. It is the top choice for live-performance singers.
6. Numeric LCD is clear and accurate in displaying receiving channel, receiving signal level and AF signal strength.
7. High performance cartridge. Following is frequency response figure.

X: 1000Hz	Y: -59.3dBV/Pa	Y: -84.3dBV/Pa
	Y: -57.1dBm/Pa	Y: -82.1dBm/Pa
	D: 0.0dB	D: 0.0dB
		Z: -25.0dB



8. International EIA standard half U rack. Metal case. Strong and nice.
9. Pre-programmed 16 groups of frequency to be used simultaneously without any interference, including 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B, 0C, 0D, 0E, 0F.
10. Pre-set two groups of frequencies for choice. One is for USA standard, another is for Europe standard. Following is frequency list.

USA STANDARD

CH GP	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	780.750	781.450	783.250	784.650	786.450	787.850	789.650	791.050	792.850	794.750	796.550	798.650	800.350	802.250	804.150	805.850
1	780.050	781.150	791.850	780.950	791.550	783.750	786.050	801.450	794.450	789.850	780.150	795.550	795.950	791.350	789.750	792.650
2	782.450	783.550	790.850	788.350	798.150	786.650	785.050	788.750	792.750	795.050	784.750	787.750	790.950	786.850	794.050	791.150
3	783.950	802.850	793.950	803.450	796.850	793.150	784.350	788.250	798.350	796.050	800.450	799.350	805.450	803.250	781.050	801.550
4	785.650	800.150	797.750	795.650	791.250	793.250	796.650	799.750	790.350	787.950	797.950	780.850	786.550	794.350	794.650	799.950
5	787.050	804.950	805.250	787.650	785.350	796.250	793.650	781.650	798.050	802.550	802.750	796.750	785.150	790.450	782.550	788.850
6	788.950	798.950	789.150	786.150	795.250	803.550	789.450	782.650	784.450	804.150	791.950	796.450	802.950	791.750	783.350	782.050
7	790.250	788.650	784.050	803.750	793.750	803.950	795.450	787.450	782.350	785.750	803.050	781.850	804.650	799.550	801.050	804.350
8	792.150	801.250	799.250	794.550	804.550	797.550	780.250	784.250	803.350	796.950	792.450	781.350	787.550	802.050	800.650	799.850
9	804.050	805.550	788.550	798.750	797.050	792.550	800.550	791.450	805.050	800.050	801.150	799.150	782.250	784.950	790.750	789.250
A	803.150	786.750	781.750	789.350	797.250	791.650	783.450	786.950	802.350	799.050	800.850	786.350	794.850	784.150	800.250	805.150
B	801.350	780.450	787.250	799.650	792.350	784.850	798.650	792.050	790.150	788.450	792.250	783.650	780.550	798.250	793.350	797.350
C	799.450	804.450	785.250	802.650	789.950	804.750	795.850	800.750	805.350	789.050	801.750	793.550	788.150	795.350	783.850	787.150
D	797.650	794.250	796.350	780.350	781.250	794.950	783.050	793.050	790.650	784.550	792.950	801.850	796.150	790.050	795.150	798.550
E	795.750	800.950	782.850	790.550	788.050	797.850	781.950	780.650	786.250	793.450	783.150	787.350	798.850	804.850	785.450	801.650
F	793.850	802.150	782.150	785.850	804.250	801.950	798.450	794.150	785.550	789.550	797.150	782.750	785.950	803.650	782.950	781.550

FREQUENCY LIST

EUROPE STANDARD

CH GP	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	851.050	851.950	852.650	853.550	854.250	855.150	855.850	856.950	857.650	858.550	859.250	860.150	861.850	863.050	863.950	864.750
1	851.700	851.850	854.700	856.150	861.600	862.400	859.200	858.500	861.400	852.100	857.800	857.300	860.700	861.950	851.300	857.000
2	852.150	853.100	857.100	861.000	852.400	859.650	863.500	857.200	853.750	854.450	861.150	854.000	862.950	857.900	863.150	858.100
3	852.950	853.800	851.550	863.600	857.850	863.200	856.100	859.400	861.500	853.000	860.250	861.050	863.750	862.850	863.550	855.500
4	851.400	858.050	858.700	859.300	861.200	851.500	859.950	860.400	857.450	858.200	855.000	855.950	854.900	863.350	856.700	857.150
5	852.050	855.050	856.800	853.350	854.500	856.600	854.600	862.300	860.050	851.200	858.000	862.350	856.850	853.400	851.900	856.050
6	853.950	856.350	858.400	860.750	862.550	858.150	856.450	862.100	854.800	858.750	862.250	856.850	859.350	861.450	860.350	854.750
7	854.350	856.000	859.550	862.200	863.300	860.900	857.950	859.900	858.350	862.700	861.550	859.000	851.600	859.150	851.450	852.600
8	853.650	862.900	859.100	863.400	854.050	861.300	851.350	860.650	862.800	859.050	852.000	852.200	853.600	862.450	861.250	857.700
9	851.250	854.950	860.500	855.450	857.350	861.900	858.800	862.650	853.900	854.200	856.200	856.300	854.300	859.850	852.350	856.400
A	852.550	855.300	860.100	860.300	860.600	863.700	860.200	863.000	862.750	855.750	863.450	861.350	859.700	855.350	860.000	855.100
B	852.300	857.750	852.800	861.800	862.750	856.750	852.500	857.050	852.250	862.500	853.500	860.800	862.050	853.700	853.200	855.650
C	853.250	854.850	859.800	863.100	863.800	851.150	859.750	858.600	855.400	860.450	863.250	856.550	855.200	851.750	859.500	854.550
D	855.600	855.800	854.150	858.250	859.450	855.700	861.100	851.800	853.150	854.650	853.300	861.750	858.300	861.650	858.450	852.850
E	853.450	856.650	858.900	862.000	856.250	857.600	861.700	860.850	851.650	859.600	852.700	854.400	857.550	860.550	858.650	853.850
F	857.250	857.500	852.900	856.500	855.250	855.900	856.900	855.550	851.100	852.450	863.650	860.950	853.050	862.600	858.950	854.100

FREQUENCY LIST